## Beewalk 2019 summary

The 2019 'Beewalk' season started with cooler than average temperatures, gusty winds, followed by long periods of rain. All of these factors made the surveys more challenging to complete, in addition to reducing the number of bumblebees out foraging at the time of the surveys.

However, with the help of 29 volunteers, we surveyed 59 transects over 19 sites across the Yorkshire Dales and Forest of Bowland AONB. We recorded a total of 2,110 bumblebees, which equates to 39 bumblebees per 1000m of transect surveyed. There were 11 different species recorded, including three cuckoo species and the scarcer bilberry bumblebee was recorded in higher numbers than previous years. As was expected the white and buff-tailed bumblebees were the most abundant, with some changes in abundance of other species such as the red-tailed and common carder bees.

The average number recorded was down on previous years, but this was not the case at all sites – rather a greater drop in numbers at a few sites, with some fluctuation either way at the majority, which can be expected. The sites with the lowest numbers recorded will likely be afforded further investigation in 2020.

All the wildflower meadows are still providing better quality and diversity in forage for bumblebees and other invertebrates, which is shown in the "flowers visited" data. Clovers and yellow-rattle were, as in previous years, the most visited species in both the ancient and restored meadows. Visits to common knapweed were more dominant in the restored meadows compared to those in the ancient meadows, again as in previous years, but these visits were much lower in number than previously recorded.

The greater abundance and diversity of the bumblebees in the restored meadows, compared to the modern meadows, demonstrates the increase in foraging habitat in the meadows where restoration work has been carried out. In addition, the presence of the majority of floral species in the restored meadows most commonly visited by bumblebees, suggests that the restoration work has effectively transferred the bumblebees' favoured flora.

The comparable bumblebee abundance and species numbers with the ancient meadows also shows that overall, the restored meadows are supporting the foraging bumblebee numbers that would be expected in a florally diverse, traditionally managed meadow – in other words the restoration work has been successful in terms of effectively expanding the available food resource for this valuable and vulnerable pollinator.

The full report is available as a .pdf by email or printed copy by post.

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